0145104 DBA Accession No.: 93-03156 PATENT
Particular expressed sequence tag from human cDNA - corresponding to gene transcription product, and useful for gene tagging, chromosome mapping and tissue typing
PATENT ASSIGNEE: U.S.Dept.Health-Human-Serv. 1993
PATENT NUMBER: WO 9300353 PATENT DATE: 930107 WPI ACCESSION NO.: 93-036325 (9304)
PRIORITY APPLIC. NO.: US 837195 APPLIC. DATE: 920212
NATIONAL APPLIC. NO.: WO 92US5222 APPLIC. DATE: 920619
LANGUAGE: English
ABSTRACT: 315 **Enriched oligonucleotides** of specified DNA sequence, which correspond to particular expressed sequence tags (ESTs), are claimed along with their complementary **sequences** and allelic variations. The following are also claimed: (a) a construct comprising a vector and an enriched oligonucleotide; (b) a panel of at least 100 oligonucleotides; (c) an antisense oligonucleotide capable of blocking expression of the gene product of any of the oligonucleotide **sequences** ; and (d) a triple helix probe for blocking expression of the gene product of the **enriched oligonucleotides**. In a preferred embodiment, the oligonucleotides correspond to transcription products of human genes and are markers for human genes transcribed in vivo. The oligonucleotides are grouped according to metabolic and structural functioning and developmental control. The ESTS may facilitate the tagging of most expressed human genes within a few yr at reduced cost compared with complete genomic sequencing. The ESTs could provide new genetic markers, nucleotide reagents and DNA-based diagnostic and therapeutic agents. The agents may be used for e.g. mapping gene locations or tissue typing. (199pp)
DESCRIPTORS: human expressed sequence tag DNA sequence, antisense oligonucleotide, triple helix probe, appl. gene tagging, chromosome mapping, tissue typing mammal
SECTION: GENETIC ENGINEERING AND FERMENTATION-Nucleic Acid Technology (A1)

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ID   Q39829 standard; DNA; 390 BP.
AC   Q39829;
DT   20-MAY-1993  (first entry)
DE   Expressed Sequence Tag human gene marker EST00165.
KW   expressed sequence tag; human genome project; chromosome;
KW   human gene sequencing; PCR mapping; somatic cell hybrids;
KW   sublocalisation; gene tagging; tissue typing.
OS   Synthetic.
PN   WO9300353-A.
PD   07-JAN-1993.
PF   19-JUN-1992; U05222.
PR   20-JUN-1991; US-716831.
PR   12-FEB-1992; US-837195.
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICE.
PI   Adams MD,  Venter JC;
DR   WPI; 93-036325/04.
PT   Particular expressed sequence tags from human CDNA - corresponds
PT   to transcription prods. of genes, useful for tagging genes,
PT   mapping chromosomes and tissue typing
PS   Claim 3; Page 153; 199pp; English.
CC   This sequence represents an EST (expressed sequence tag) ESTs are markers
CC   for human genes actually transcribed in vivo. Unlike the random genomic
CC   DNA sequence tagged sites (STSs), ESTs point directly to expressed genes.
CC   The use of ESTs could facilitate the tagging of most expressed human
CC   genes within a few years at a fraction of the cost of complete genomic
CC   sequencing. Using PCR primers Q39419-Q39580 (sequences designed
CC   from the ESTs) sublocalisation of an EST can be achieved with panels of
CC   fragments from specific chromosomes or pools of large genomic clones in
CC   an analogous manner. This sequence represents EST00165.
SQ   Sequence   390 BP;    72 A;    113 C;    140 G;    62 T;

  Query Match          6.0%;  Score 18;  DB 6;  Length 390;
  Best Local Similarity 100.0%;  Pred. No. 2.85e-01;
  Matches   18;  Conservative    0;  Mismatches   0;  Indels   0;  Gaps   0;

Db    151 ctggacattctgggggaac 168
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Qy    143 CTGGACATTCTGGGGAAC 160
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